## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

05-041897

(43) Date of publication of application: 19.02.1993

(51)Int.CI.

H04R 1/40

H03H 17/02

H04R 3/12

(21)Application number: 03-197864

(71)Applicant : PIONEER ELECTRON CORP

(22)Date of filing:

07.08.1991

(72)Inventor: YANAGAWA HIROBUMI

SAITO KEISHI

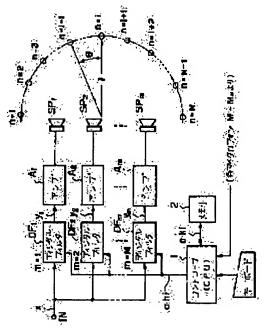
**HAGIWARA SUMIO** 

## (54) SPEAKER EQUIPMENT AND DIRECTIVITY CONTROL METHOD

## (57)Abstract:

PURPOSE: To realize the speaker equipment and the directivity control method able to control variably and optionally not only the directivity in 2-dimension direction but also the directivity in 3-dimension through electric signal processing.

CONSTITUTION: The equipment is provided with a common input terminal IN receiving a voice signal to be sounded, plural speaker units SP1-SPm arranged in a line, and plural digital filters DF1-DFm whose filter coefficient calculated by the nonlinear optimizing method in response to the object directivity pattern of the sound radiation by the plural speaker units SP1-SPm are set corresponding to the speaker units SP1-SPm while being inserted and connected between the common input terminal IN and the speaker units SP1SPm.



## **LEGAL STATUS**

[Date of request for examination]

13.07.1998